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METHOD AND SYSTEM FOR DELIVERING AND MONITORING AN ON-DEMAND PLAYLIST OVER A NETWORK USING A **TEMPLATE**

RELATED APPLICATION

This application claims the benefit of U.S. Provisional Application No. 60/217,914, filed Jul. 13, 2000, the benefit of the earlier filing date of which is hereby claimed under 35 U.S.C. § 119 (e).

FIELD OF THE INVENTION

The present invention relates to providing content over a network, and more specifically to providing on-demand 15 playlist content to a requesting device over a network.

BACKGROUND OF THE INVENTION

The Internet has seen expansive growth over the last 20 several years. Not only are there more Web sites providing a wide range of information, service, and goods, there are more users on the Internet than ever before.

Today, users may experience multimedia clips, purchase goods, access the world's news as it happens, obtain reviews 25 on various items or products in a variety of formats, or access a variety of resources all on the Internet. For example, a user may read product reviews, view pictures of a product, or in some instances, watch a video presentation related to the product.

In order to access the available resources, however, Internet users are exposed to a variety of different media types while visiting a Web site. Not only may users access textual information, they may also view graphical images, or watch multimedia presentations, including audio and video, that 35 may be streamed or downloaded. The steps required to access this media, however, may be overwhelming to many of the users. Not only do certain sites require users to use particular products to access the media, many sites require to play certain media files. For example, a user may have to download a particular media player, upgrade to a different version, or know the particular programs they are using on their system. With so many available options to access and play media files, users are constantly bombarded with dif- 45 ferent requirements.

Another requirement to view many multimedia sites is a high bandwidth connection to the Internet. Many sites rely on the user having a high bandwidth when streaming media to the user. While the majority of businesses today have 50 access to broadband, the majority of home users connect to the Internet through a low speed dial-up modem resulting in a poor multimedia experience.

SUMMARY OF THE INVENTION

According to one aspect of the invention, a playlist is delivered to a requesting device over a network. The playlist is delivered to the requesting device in an optimized manner.

According to another aspect of the invention, attributes of 60 the requesting device are determined. The attributes may include information relating to the operating system of the requesting device; a media player; a bandwidth parameter; presence or absence of a firewall, permissions related to the requesting device, and the like.

According to yet another aspect of the invention, instructions are generated that correspond to the performance of the

playlist on the requesting device. The instructions are based on the determined attributes and are optimized for the requesting device.

According to still yet another aspect of the invention, the instructions are delivered to the requesting device and a trigger is monitored to determine when to execute the instructions associated with the playlist.

According to still yet another aspect of the invention, the playlist is retrieved from a location on the network that is directed at providing optimized performance of the playlist on the requesting device. When the playlist optimized for the requesting device is cached at the location on the network, the optimized playlist is delivered to the requesting device. Otherwise, a default playlist is delivered to the device and a playlist is created that is cached for future delivery. Alternatively, the default playlist may be generated in realtime and delivered.

Still yet another aspect involves monitoring the performance of the playlist. When the playlist is performing properly the performance of the cliplets is monitored. When the playlist is not performing properly, the cliplet may be retrieved from another location on the network in order to improve performance of the playlist.

BRIEF DESCRIPTION OF THE DRAWINGS

- FIG. 1 illustrates a schematic diagram of an exemplary system overview;
- FIG. 2 shows a schematic diagram illustrating an exemplary system overview in which local area networks and a wide area network are interconnected by routers;
- FIG. 3 illustrates a schematic diagram of an exemplary origin server that is operative to provide a web site;
- FIG. 4 shows a schematic diagram of an exemplary mobile device;
- FIG. 5 illustrates a functional block diagram showing an on-demand content delivery system using a CDN;
- FIG. 6 illustrates a basic operating attributes inquiry the user to know the configuration of their system in order 40 system containing a set of exemplary basic attributes of requesting devices;
 - FIG. 7 illustrates an exemplary adlet playlist;
 - FIG. 8A shows an exemplary adlet request format; FIG. 8B shows an exemplary cliplet format;
 - FIG. 9 illustrates an exemplary functional block diagram generally illustrating the content delivery system;
 - FIG. 10 illustrates an overview of the process for the on-demand content delivery system;
 - FIG. 11 shows a process for creating an adlet template optimized for a requesting device;
 - FIG. 12 illustrates a process for retrieving additional attributes from a requesting device;
 - FIG. 13 illustrates the process of requesting an adlet playlist;
 - FIG. 14 shows a process for monitoring the performance of an adlet; and
 - FIG. 15 illustrates a process for generating instructions for delivering the on-demand content; in accordance with aspects of the invention.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT

In the following detailed description of exemplary embodiments of the invention, reference is made to the accompanied drawings, which form a part hereof, and which